

Claims

1. A battery apparatus, characterized by comprising:
a case having a width, a thickness, and a length;
5 a battery cell accommodated inside the case; and

a battery-side terminal provided on an end surface positioned at one of ends of the case in a length direction and electrically connected to the battery cell, wherein
10 a bottom surface positioned on one side of the case in a thickness direction is aligned with an attachment surface of a battery attachment section of electronic equipment to attach the battery apparatus by sliding the case along the length direction thereof, and the battery-side terminal comes
15 in contact with an attachment section-side terminal of the battery attachment section, wherein

the battery-side terminal is provided on the end surface,
an identification section for identifying a characteristic of the battery apparatus is provided at a
20 location on the end surface and on a side of the battery-side terminal in the width direction,

the identification section is configured with an identification recess formed in a manner open to the end surface,
and

25 at least one of a position, a cross-sectional shape, and a length of the identification recess is formed on the basis of the characteristic of the battery apparatus.

2. The battery apparatus according to Claim 1,
30 characterized in that

the identification recess is provided on each of both

sides of the battery-side terminal in the width direction.

3. The battery apparatus according to Claim 1, characterized in that

5 the identification recess is provided at a location near the bottom surface.

4. The battery apparatus according to Claim 1, characterized in that

10 the identification recess is formed in a manner open to the bottom surface.

5. The battery apparatus according to Claim 1, characterized in that

15 a recessed portion into which a locking hook of the attachment section is inserted is formed at a location on each of both sides of the case in the width direction and near the bottom surface, and a portion of the identification recess located close to the recessed portion is formed into an angled
20 surface that nears the battery-side terminal as moving away from the bottom surface.

6. The battery apparatus according to Claim 1, characterized in that

25 the battery-side terminal is provided approximately in the middle of the end surface of the case in the width direction.

7. The battery apparatus according to Claim 1, characterized in that

30 the characteristic of the battery apparatus includes at least one piece of information indicative of a capacity,

a suitable charging current value, a possibility of quick charge of the battery apparatus.

8. Electronic equipment having a battery attachment
5 section to which a battery apparatus is releasably attached, characterized in that:

the battery apparatus includes:

a case having a width, a thickness, and a length;

a battery cell accommodated inside the case; and

10 a battery-side terminal provided on an end surface positioned at one of ends of the case in a length direction and electrically connected to the battery cell, wherein

the battery-side terminal is provided on the end surface,

an identification section for identifying a
15 characteristic of the battery apparatus is provided at a location on the end surface and on a side of the battery-side terminal in the width direction,

the identification section is configured with an identification recess formed in a manner open to the end surface,

20 and

at least one of a position, a cross-sectional shape,

and

a length of the identification recess is formed on the basis of the characteristic of the battery apparatus; and

25 battery attachment section is provided with:

an attachment section-side terminal which connects to the battery-side terminal in a state in which a bottom surface positioned at one end of the case in a thickness direction is aligned with an attachment surface of the battery attachment
30 section to attach the battery apparatus by sliding the case along the length direction thereof, and

an identification projection which is inserted into the identification recess of the battery apparatus having the characteristic usable for the electronic equipment.

5 9. The electronic equipment according to Claim 8, characterized in that

the identification recess is provided on each of both sides of the battery-side terminal in the width direction.

10 10. The electronic equipment according to Claim 8, characterized in that

the identification projection is provided at a location near the attachment surface.

15 11. The electronic equipment according to Claim 8, characterized in that

a portion of the identification projection which faces the attachment surface is connected to the attachment surface.

20 12. The electronic equipment according to Claim 8, characterized in that

the battery-side terminal is provided approximately in the middle of the end surface of the case in the width direction.

25 13. The electronic equipment according to Claim 8, characterized in that

the characteristic of the battery apparatus includes at least one piece of information indicative of a capacity, a suitable charging current value, a possibility of quick
30 charge of the battery apparatus.

14. Electronic equipment having a battery attachment section to which a battery apparatus is releasably attached, characterized in that:

the battery apparatus includes:

5 a case having a width, a thickness; and a length,
a battery cell provided inside the case; and

a battery-side terminal provided on an end surface positioned at one of ends of the case in a length direction and electrically connected to the battery cell, wherein

10 the battery-side terminal is provided on the end surface,
an identification section for identifying a characteristic of the battery apparatus is provided at a location on the end surface and on a side of the battery-side terminal in the width direction,

15 the identification section is configured with an identification recess formed in a manner open to the end surface, and

at least one of a position, a cross-sectional shape, and a length of the identification recess is formed on the basis of the characteristic of the battery apparatus, and
20 the battery attachment section is provided with:

an attachment section-side terminal which connects to the battery-side terminal in a state in which the battery apparatus attached to the battery attachment section; and

25 detection means for detecting at least one of the position, the cross-sectional shape, and the length of the identification recess of the battery apparatus; wherein

the characteristic of the battery apparatus is determined on the basis of a detection result by the detection
30 means.

15. The electronic equipment according to Claim 14, characterized by comprising:

a charging section for performing a charging operation by supplying a charging current to the battery cell of the battery apparatus; and

a control section for controlling the charging section so as to perform a charging operation suitable for the characteristic of the battery apparatus determined on the basis of the detection result by the detection means.

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16. The electronic equipment according to Claim 14, characterized in that

the characteristic of the battery apparatus includes at least one piece of information indicative of a capacity, a suitable charging current value, quick chargeability of the battery apparatus.

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